

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant : Gross et al.  
Appl. No. : 09/643,141  
Filed : 08/22/00  
Title : GRAFFITI REMOVER, PAINT STRIPPER, DEGREASER  
  
Grp./A.U. : 1746  
Examiner : B. Carrillo  
  
Docket No. : M 6636 CC/CSAP

**CERTIFICATE OF MAILING**

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**SUPPLEMENTAL APPEAL BRIEF UNDER 37 C.F.R. 1. 193(b)(2)(ii)**

Sir:

**REAL PARTY IN INTEREST**

The real party in interest is Cognis Corporation, 5051 Estecreek Drive,  
Cincinnati, OH 45232.

**RELATED APPEALS AND INTERFERENCES**

None.

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### STATUS OF CLAIMS

Claims 33-50, 53 and 54 are the subject of this appeal.

### STATUS OF AMENDMENTS

No amendments were made after final rejection.

### SUMMARY OF THE INVENTION

Briefly stated, the present invention is directed to a process for cleaning hard surfaces involving contacting the hard surfaces with a terpene-free cleaning composition containing from about 2 to about 12% by weight of an oil-soluble anionic surfactant, from about 0.2 to about 6% by weight of a water-soluble anionic surfactant, from about 3 to about 96% by weight of a primary solvent based on a C<sub>1-4</sub> alkyl ester of a C<sub>6-22</sub> saturated or unsaturated carboxylic acid, from about 2 to about 14% by weight of a short-chain co-surfactant, and remainder, to 100%, water. See page 8, line 16, to page 10, line 10 of the application.

### ISSUES

Whether claims 33-48 are obvious under 35 U.S.C. § 103(a) over Stevens (US Patent No. 6,172,031).

Whether claims 49 and 50 are obvious under 35 U.S.C. § 103(a) over Stevens (US Patent No. 6,172,031) in view of Van Eenam (US 5,585,341).

Whether claims 53 and 54 are obvious under 35 U.S.C. § 103(a) over Stevens (US Patent No. 6,172,031) in view of Cilley (US 6,180,583).

### GROUPING OF THE CLAIMS

The claims do not stand and fall together. More particularly, the limitations contained in claims 35, 43, 49, 50, 53 and 54 are nowhere taught, suggested or motivated

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by any of references relied upon by the Examiner in such a way as to render them prima facie obvious.

### ARGUMENT

**The Stevens '031 reference fails to contain the requisite teaching or suggestion to motivate the routineer to make those selections necessary for rendering the claimed invention prima facie obvious.**

Initially, Appellant would like to note that it is extremely well settled that in order to establish a prima facie case of obviousness under 35 U.S.C. 103, based upon a single reference, the Office must show an art-recognized motivation to modify the reference in the manner asserted by the Office. See, *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Furthermore, it is impermissible to employ hindsight, based on an Applicant's own disclosure, in asserting that it would be obvious to modify the teaching of the reference in a particular manner. See, *In re Pavlecka*, 138 USPQ 152 (CCPA 1963). Appellant has argued that whereas the present invention **requires** that its composition be terpene-free, the Stevens reference **favours** the presence of terpene in its composition.

The Examiner contends, however, that because Stevens discloses the presence of terpene in its composition as being optional, one of ordinary skill in the art would therefore choose not to employ said terpene, thereby rendering the claimed invention prima facie obvious. Appellant respectfully disagrees with the Examiner's position for the following reasons.

The present invention is directed to the combination of 5 separate and distinct ingredients, namely, an oil-soluble anionic surfactant, a water-soluble anionic surfactant, an alkyl ester, a short-chain co-surfactant and water. Of these 5 ingredients, only **one** is disclosed as also being mandatory by the Stevens reference, i.e., water. The remaining 4 out of 5 ingredients which include an oil-soluble anionic surfactant, a water-soluble

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anionic surfactant, an alkyl ester, a short-chain co-surfactant are all taught as being merely optional. It is not imperative that any of them be used. Therefore, one of ordinary skill in the art, after having read the entire Stevens reference, would then need to make a number of critical choices with regards to the remaining 4 of 5 claimed ingredients in order to arrive at the claimed invention. Furthermore, one other critical choice, i.e., choosing NOT to use terpene, would also have to be made. Appellant respectfully submits, however, that prima facie obviousness should not be based on possibilities and/or probabilities.

In *Ex parte Wittpenn*, 16 USPQ2d 1730 (BPAI 1990), an Examiner had rejected an Applicant's claims on the grounds that all of the claimed components were disclosed in a prior art reference (Roggenkamp). In that case it was found that although the prior art contained all elements of Applicant's invention, the prior art indicated no preference for any particular component of one of the elements, i.e., the nonionic surfactant. The Board there held that, "... since we have been apprised of no disclosure within the Roggenkamp reference that would have led the routineer to make the **critical** selections to arrive at the claimed surfactant composition, we find that no prima facie case of obviousness has been established and that the rejection before us cannot be sustained." *Id.* at 1731 (emphasis added). The same is true here. The Stevens reference contains no motivational disclosure which might guide the routineer into making the critical selections necessary to arrive at the claimed invention, said critical selections being the 4 out of 5 ingredients necessary for making the claimed invention. ①

Appellant would also like to note that not only does this reference fail to motivate the routineer to employ all the claimed ingredients of the present invention, it also fails to motivate the use of the **claimed amounts** of each ingredient. More particularly, the Stevens reference, rather than teaching the use of the claimed amounts of oil-soluble anionic surfactant and water-soluble anionic surfactants in its composition, instead, teaches the total amount of any and all surfactants, in gen ral, which may be present in its composition. A teaching relating to a total amount of a generic surfactant which may be ②

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present in a composition fails to satisfy the burden of proof required to establish a prima facie case of obviousness.

Finally, Appellant would also like to note that this reference's teaching must be read in light of the fact that its composition is **primarily** directed to cleaning **textiles**, whereas the claimed composition is **primarily** intended to be used for cleaning hard surfaces. The amount and type of surfactants used in a textile cleaning compositions typically differs from those employed in hard surface cleaning compositions. (3)

With respect to claim 35, the Stevens reference admittedly fails to teach the use of the claimed isopropyl amine salt of dodecylbenzene sulfonic acid. In an effort to overcome this admitted lack of teaching, the Examiner contends that because this reference teaches an alkyl amine dodecylbenzenesulfonate, it would therefore be obvious to employ the claimed isopropyl amine salt of dodecylbenzene sulfonic acid. Appellant respectfully disagrees with the Examiner's premise upon which the conclusion of obviousness is based, for the following reason. (4) Drop

The requisite motivation for the routineer to wish to employ the claimed isopropyl amine salt of dodecylbenzene sulfonic acid is still believed by Appellant to be lacking. The number of alkyl amine dodecylbenzenesulfonate permutations encompassed by the generic definition of this compound are numerous. Thus, to believe that the routineer would be motivated to choose the claimed **isopropyl amine salt** of dodecylbenzene sulfonic acid, rather than any of the other numerous candidates, is believed by Appellant to be an example of an improper "obvious to try" rationale. more particularly, it is well settled that where the prior art gives either no indication as to which parameters are critical or no direction as to which of many possible choices is likely to be successful, prima facie obviousness may not be based on an improper "obvious to try" rationale. See, In re O'Farrell, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). Clearly such is the case here. (5) Drop

The same reasoning holds true for claim 43 and its use of a propylene glycol n-butyl ether short-chain cosurfactant. Nowhere within the four corners of the Stevens '031

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reference is there provided any disclosure which might motivate the routineer to wish to employ the claimed propylene glycol n-butyl ether, as opposed to any of the other numerous candidates encompassed by Stevens' teaching regarding the use of a glycol ether in its composition.

Finally, the Stevens' '031 reference fails to teach or suggest the use of the claimed amounts of isopropyl amine salt of dodecylbenzene sulfonic acid and propylene glycol n-butyl ether. As was noted earlier by Appellant, Stevens merely provides some insight into the **total amount** of surfactant which may be employed in its composition. To assume that the routineer would wish to employ the claimed amounts of isopropyl amine salt of dodecylbenzene sulfonic acid and propylene glycol n-butyl ether based on Stevens' general disclosure regarding the total amount of surfactant which may be employed once again amounts, in Appellant's opinion, to the use of an improper "obvious to try rationale". This is especially true when one takes into account that this reference's teaching, and the motivation which it inspires, must be read in light of the fact that its composition is directed to cleaning **textiles**, whereas the claimed composition is intended to be used for cleaning hard surfaces. The amount and type of surfactants used in a textile cleaning composition typically differ from those employed in hard surface cleaning compositions. It cannot be presumed that they are interchangeable and therefore, prima facie obvious. This, too, will have an effect on the routineer's motivation as to which type of components to employ in the Steven's composition.

**Neither the Stevens '031 reference nor the Van Eenam '341 reference, alone or in combination, contain the requisite teaching or suggestion to motivate the routineer to wish to employ the compounds and weight percent amounts disclosed in claims 49 and 50 of the present invention, so as to render the claimed invention prima facie obvious.**

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The Stevens' reference admittedly fails to contain any teaching or suggestion relating to the use of a cyclic ketone in its composition and, specifically, the claimed cyclohexanone. In an effort to overcome this admitted lack of teaching or suggestion, the Examiner relies upon the '341 reference for its alleged teaching regarding the use of cyclohexanone as an organic solvent in hard surface cleaners/degreasers.

The shortcomings associated with the Stevens reference are as outlined above. In view of said shortcomings, even if the Stevens' reference were to be combined with the Van Eenam reference, as is suggested by the Examiner, they would nevertheless fail to render the claimed invention prima facie obvious on the grounds that each and every element of said claimed invention is neither taught nor suggested by the combined teachings of the prior art references.

*Not addressed*

**Neither the Stevens' '031 reference nor the Cilley' '583 reference, alone or in combination, contain the requisite teaching or suggestion to motivate the routineer to wish to employ the compounds and weight percent amounts disclosed in claims 53 and 54 of the present invention, so as to render the claimed invention prima facie obvious.**

The Stevens' reference admittedly fails to contain any teaching or suggestion relating to the use of a thickening agent in its composition and, specifically, the claimed bentonite. In an effort to overcome this admitted lack of teaching or suggestion, the Examiner relies upon the '583 reference for its alleged teaching regarding the use of thickeners in hard surface cleaners/degreasers.

Here too, the shortcomings associated with the Stevens' reference are as outlined above. In view of said shortcomings, even if the Stevens' reference were to be combined with the Cilley reference, as is suggested by the Examiner, they would

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nevertheless fail to render the claimed invention prima facie obvious on the grounds that each and every element of said claimed invention is neither taught nor suggested by the combined teachings of the prior art references.

*not addressed*

#### SUMMARY

The Stevens' '031 reference fails to contain the requisite teaching or suggestion to motivate the routineer to wish to combine all of the claimed ingredients, in the claimed ratios by weight necessary for establishing a prima facie case of obviousness.

Neither the Stevens' '031 reference nor the Van Eenam' '341 reference, alone or in combination, contain the requisite teaching or suggestion to motivate the routineer to wish to employ the compounds and weight percent amounts disclosed in claims 49 and 50 of the present invention, so as to render the claimed invention prima facie obvious.

Neither the Stevens' '031 reference nor the Cilley' '583 reference, alone or in combination, contain the requisite teaching or suggestion to motivate the routineer to wish to employ the compounds and weight percent amounts disclosed in claims 53 and 54 of the present invention, so as to render the claimed invention prima facie obvious.

It is requested for the reasons given above, that the Board find for Appellant on all




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of the issues, and reverse the Examiner's Final Rejections.

Respectfully submitted,

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215-628-1416

Enc.: Appendix

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## APPENDIX

### CLAIMS ON APPEAL

- 1
33. A process for cleaning a hard surface comprising contacting the surface with a cleaning-effective amount of a terpene-free cleaning composition containing:
- (a) from about 2 to about 12% by weight of an oil-soluble anionic surfactant;
  - (b) from about 0.2 to about 6% by weight of a water-soluble anionic surfactant;
  - (c) from about 3 to about 96% by weight of a primary solvent consisting of a C<sub>1-4</sub> alkyl ester of a C<sub>6-22</sub> saturated or unsaturated carboxylic acid;
  - (d) from about 2 to about 14% by weight of a short-chain cosurfactant; and
  - (e) remainder, water, all weights being based on the total weight of the composition.

- 2
34. The process of claim 33 wherein the oil-soluble anionic surfactant is selected from the group consisting of amine salts of dodecylbenzenesulfonic acid, calcium salts of dodecylbenzenesulfonic acid, phosphate esters, and mixtures thereof.

- 3
35. The process of claim 33 wherein the oil-soluble anionic surfactant is an isopropylamine salt of dodecylbenzenesulfonic acid. *OK abin*

- 4
36. The process of claim 33 wherein the oil-soluble anionic surfactant is present in the composition in an amount of from about 6 to about 8% by weight, based on the weight of the composition.

21, 36, 42, 40  
36, 42, 40

510/ 210, 245, 421, 405, 422  
424, 426, 428  
429, 437  
432, 495, 498  
203, 206, 212  
108

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5  
37. The process of claim 33 wherein the water-soluble anionic surfactant is selected from the group consisting of alkali metal salts of fatty acids, organic base salts of fatty acids, alkyl sulfates, alkyl ether sulfates, alkyl aromatic sulfonates, alkyl sulfonates, alpha olefin sulfonates, sulfosuccinates, and mixtures thereof.

6  
38. The process of claim 33 wherein the water-soluble anionic surfactant is a C12-C14 fatty alcohol sulfate.

7  
39. The process of claim 33 wherein the water-soluble anionic surfactant is present in the composition in an amount of from about 1 to about 2% by weight, based on the weight of the composition.

8  
40. The process of claim 33 wherein the primary solvent is a C<sub>8</sub>-C<sub>10</sub> methyl ester.

9  
41. The process of claim 33 wherein the primary solvent is present in the composition in an amount of from about 40 to about 50% by weight, based on the weight of the composition.

10  
42. The process of claim 33 wherein the short-chain cosurfactant is selected from the group consisting of C<sub>3</sub>-C<sub>6</sub> alcohols, glycols, glycol ethers, pyrrolidones, glycol ether esters, and mixtures thereof.

11  
43. The process of claim 33 wherein the short-chain cosurfactant is propylene glycol n-butyl ether.

12  
44. The process of claim 33 wherein the short-chain cosurfactant is present in the composition in an amount of from about 8 to about 10% by weight, based on the weight

Cal. 10  
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of the composition.

<sup>43</sup>  
~~45.~~ The process of claim 33 wherein the composition has a pH value of less than about 9.

<sup>44</sup>  
~~46.~~ The process of claim 33 wherein the composition has a thermal stability ranging from about 10 to about 70°C.

<sup>45</sup>  
~~47.~~ The process of claim 33 wherein the primary solvent and water are present in the composition in a ratio by weight ranging from about 50:1 to about 1:4.

<sup>46</sup>  
~~48.~~ The process of claim 33 wherein the primary solvent and water are present in the composition in a ratio by weight of about 1.5:1.

<sup>47</sup>  
~~49.~~ The process of claim 33 wherein the terpene-free cleaning composition further comprises from about 1 to about 35% by weight of a cyclic ketone.

<sup>48</sup>  
~~50.~~ The process of claim 49 wherein the cyclic ketone is cyclohexanone.

<sup>49</sup>  
~~53.~~ The process of claim 33 wherein the cleaning composition further contains a thickening agent.

<sup>50</sup>  
~~54.~~ The process of claim 53 wherein the thickening agent is tetraalkyl ammonium bentonite.